

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-33. (Canceled)

34. (Currently Amended) A computer system for documenting mutations, the system comprising:

a receiving module for receiving mutation information;

a disassembling module for disassembling the mutation information into discrete elements, wherein the discrete elements include a patient identification value, a reference sequence identification value, a starting point value within a reference sequence, and an ending point within the reference sequence;

a storage module stores said discrete elements such that the mutation may be presented using both user-preferred and published standards;

a query receiving module for receiving a query from a user for a mutation presentation;

a selection receiving module for receiving a selection from the user of one of the user-preferred and published standards;

an assembling module for assembling one or more of the discrete elements in response to the selection from the user of the one of the user-preferred and published standards, the one or more discrete elements being assembled in accordance with the selected user-preferred standard or published standard; and

a displaying module for displaying the mutation to the user in accordance with the user-preferred standard or the published standard selected by the user.

35. (Original) The system of claim 34, wherein the mutation information is for one of a substitution, inversion, insertion, deletion, translocation, complex rearrangement and combinations thereof.

36. (Original) The system of claim 34, wherein the discrete elements include one or more of a mutation identification value, patient identification value, mutation type, reference sequence identification value, starting point value within the reference sequence, ending point within the reference sequence, length of an insertion, native value of sequenced genetic information, observed value of the mutation.

37. (Original) The system of claim 34, wherein the user-preferred standards are user defined.

38. (Original) The system of claim 34, wherein the published standards are the recommended standards published the Human Genome Association.

39. (Canceled).

40. (Original) The system of claim 34, further comprising:
a providing module for providing a list of known mutations for particular sequenced genetic information.

41. (Original) The system of claim 40, wherein the sequenced genetic information is a gene.

42. (Original) The system of claim 40, further comprising:

a second receiving module for receiving a selection of a mutation from the list of known mutations.

43. (Original) The system of claim 40, further comprising:

a third receiving module receiving a request for the reference sequence for the sequenced genetic information.

44. (Original) The system of claim 43, further comprising:

a second providing component for providing the reference sequence for the sequenced genetic information.

45. (Original) The system of claim 44, further comprising:

a third providing component for providing data entry fields for the entry of mutation information.

46. (Currently Amended) A computer system for presenting mutations, the method comprising:

an obtaining component for obtaining discrete elements for mutation information, wherein the discrete elements include a patient identification value, a reference sequence identification value, a starting point value within a reference sequence, and an ending point within the reference sequence;

a second obtaining component for obtaining a standard for presenting the mutation information, the standard being selected by a user from among a set of user-preferred and published standards;

an assembling component for assembling the mutation information utilizing the discrete elements in response to the standard selected by the user from among the set of user-preferred and published standards, the mutation information being assembled in accordance with the selected standard of presentation; and

a displaying component for displaying the mutation to the user in accordance with the standard of presentation selected by the user, wherein

(1) when the user selects a user-preferred standard, the mutation information is assembled and displayed in accordance with the user-preferred standard, and

(2) when the user selects a published standard, the mutation information is assembled and displayed in accordance with the published standard.

47. (Original) The system of claim 46, wherein the standard is one of a user-preferred standard and a published standard.

48. (Original) The system of claim 47, wherein the user-preferred standard is user defined.

49. (Original) The system of claim 47, wherein the published standard is published by the Human Genome Association.

50-64. (Canceled).